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NEWS 1		Web Page for STN Seminar Schedule - N. America
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NEWS 3	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 4	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 5	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS 6	FEB 10	COMPENDEX reloaded and enhanced
NEWS 7	FEB 11	WTEXTILES reloaded and enhanced
NEWS 8	FEB 19	New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS 9	FEB 19	Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01
NEWS 10	FEB 23	Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS 11	FEB 23	MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS 12	FEB 23	TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 MeSH terms
NEWS 13	FEB 23	Three million new patent records blast AEROSPACE into STN patent clusters
NEWS 14	FEB 25	USGENE enhanced with patent family and legal status display data from INPADOCDB
NEWS 15	MAR 06	INPADOCDB and INPAFAMDB enhanced with new display formats
NEWS 16	MAR 11	EPFULL backfile enhanced with additional full-text applications and grants
NEWS 17	MAR 11	ESBIOBASE reloaded and enhanced
NEWS 18	MAR 20	CAS databases on STN enhanced with new super role for nanomaterial substances
NEWS 19	MAR 23	CA/CAplus enhanced with more than 250,000 patent equivalents from China
NEWS 20	MAR 30	IMSPATENTS reloaded and enhanced
NEWS 21	APR 03	CAS coverage of exemplified prophetic substances enhanced
NEWS 22	APR 07	STN is raising the limits on saved answers
NEWS 23	APR 24	CA/CAplus now has more comprehensive patent assignee information
NEWS 24	APR 26	USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS 25	APR 28	CAS patent authority coverage expanded
NEWS 26	APR 28	ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 27	APR 28	Limits doubled for structure searching in CAS REGISTRY
NEWS 28	MAY 08	STN Express, Version 8.4, now available
NEWS 29	MAY 11	STN on the Web enhanced

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 NEWS 30  MAY 11  BEILSTEIN substance information now available on
                  STN Easy

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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=> file capl
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                                                        ENTRY    SESSION
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FILE COVERS 1907 - 13 May 2009  VOL 150 ISS 20
FILE LAST UPDATED: 12 May 2009  (20090512/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Feb 2009

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=> s 2006-591658/apps
             0 2006-591658/AP
             0 2006-591658/PRN
L1           0 2006-591658/APPS
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(2006-591658/AP,PRN)

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=> s us 20080269184/pn
L2             1 US 20080269184/PN
                  (US20080269184/PN)

=> select l2
ENTER ANSWER NUMBER OR RANGE (1-):1
ENTER DISPLAY CODE (TI) OR ?:rn
E1 THROUGH E30 ASSIGNED

=> s e1-e30
         58672 112-80-1/BI
          4773 1121-60-4/BI
          6315 1338-43-8/BI
           138 143-02-2/BI
            87 143-03-3/BI
         21444 143-07-7/BI
           297 14982-53-7/BI
          1356 151-41-7/BI
          1167 313-04-2/BI
          2374 361-09-1/BI
            60 40904-90-3/BI
           137 4754-44-3/BI
           396 516-95-0/BI
         26127 544-63-8/BI
         51475 57-10-3/BI
         63354 57-11-4/BI
        141242 57-88-5/BI
           488 6156-78-1/BI
            11 65028-70-8/BI
          7061 67-97-0/BI
          5401 691397-13-4/BI
            43 71794-64-4/BI
            54 72924-08-4/BI
           766 7789-46-0/BI
          2640 80-97-7/BI
             3 823808-59-9/BI
             1 864444-61-1/BI
          3770 872-85-5/BI
         17791 9005-65-6/BI
          4769 9005-67-8/BI
L3      296106 (112-80-1/BI OR 1121-60-4/BI OR 1338-43-8/BI OR 143-02-2/BI OR
               143-03-3/BI OR 143-07-7/BI OR 14982-53-7/BI OR 151-41-7/BI OR
               313-04-2/BI OR 361-09-1/BI OR 40904-90-3/BI OR 4754-44-3/BI OR
               516-95-0/BI OR 544-63-8/BI OR 57-10-3/BI OR 57-11-4/BI OR 57-88-
               5/BI OR 6156-78-1/BI OR 65028-70-8/BI OR 67-97-0/BI OR 691397-13
               -4/BI OR 71794-64-4/BI OR 72924-08-4/BI OR 7789-46-0/BI OR 80-97
               -7/BI OR 823808-59-9/BI OR 864444-61-1/BI OR 872-85-5/BI OR 9005
               -65-6/BI OR 9005-67-8/BI)

=> FIL REGISTRY

COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                75.52      75.74

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STRUCTURE FILE UPDATES: 12 MAY 2009 HIGHEST RN 1146247-90-6
DICTIONARY FILE UPDATES: 12 MAY 2009 HIGHEST RN 1146247-90-6

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=> S 14982-53-7/RN

L4   1 14982-53-7/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L4 SQIDE 1-

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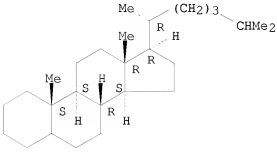
L4   ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN   14982-53-7 REGISTRY
CN   Cholestane (CA INDEX NAME)
OTHER NAMES:
CN   (8R,9S,10S,13R,14S,17R)-17-[(1R)-1,5-Dimethylhexyl]hexadecahydro-10,13-
     dimethyl-1H-cyclopenta[a]phenanthrene
CN   1H-Cyclopenta[a]phenanthrene, 17-[(1R)-1,5-dimethylhexyl]hexadecahydro-
     10,13-dimethyl-, (8R,9S,10S,13R,14S,17R)-
CN   NSC 140722
FS   STEREOSEARCH
MF   C27 H48
CI   COM
LC   STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS,
       CASREACT, CHEMLIST, CIN, EMBASE, IFICDB, IFIPAT, IFIUDB, PROMT,
       SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
     Other Sources: EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P   Roles from patents: ANST (Analytical study); BIOL (Biological study);
       OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
       RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical
       study); BIOL (Biological study); PREP (Preparation); PROC (Process);
       USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU

(Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

297 REFERENCES IN FILE CA (1907 TO DATE)
37 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
297 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
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=>

=> s l3 and porphyrin
1 112-80-1/BI
(112-80-1/RN)
1 1121-60-4/BI
(1121-60-4/RN)
1 1338-43-8/BI
(1338-43-8/RN)
1 143-02-2/BI
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1 143-03-3/BI
(143-03-3/RN)
1 143-07-7/BI
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(361-09-1/RN)
1 40904-90-3/BI
(40904-90-3/RN)
1 4754-44-3/BI
(4754-44-3/RN)

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              1 544-63-8/BI
                (544-63-8/RN)
              1 57-10-3/BI
                (57-10-3/RN)
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                (872-85-5/RN)
              1 9005-65-6/BI
                (9005-65-6/RN)
              1 9005-67-8/BI
                (9005-67-8/RN)
           5742 PORPHYRIN
              3 PORPHYRINS
           5742 PORPHYRIN
                (PORPHYRIN OR PORPHYRINS)
L5            1 L3 AND PORPHYRIN

=> d

L5   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   40904-90-3  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   21H,23H-Porphine, 5,10,15,20-tetra-2-pyridinyl-  (CA INDEX NAME)
OTHER NAMES:
CN   5,10,15,20-Tetra-2-pyridylporphine
CN   5,10,15,20-Tetrakis(2-pyridyl)porphyrin
CN   meso-Tetra-2-pyridylporphine
CN   meso-Tetrakis(2-pyridyl)porphyrin
CN   meso-Tetrakis(o-pyridyl)porphine
MF   C40 H26 N8
CI   COM
LC   STN Files:   BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
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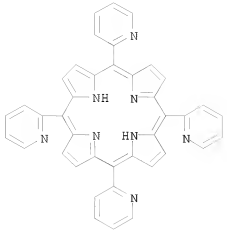

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2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
60 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file capl

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FULL ESTIMATED COST	10.41	86.15

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FILE COVERS 1907 - 13 May 2009 VOL 150 ISS 20
FILE LAST UPDATED: 12 May 2009 (20090512/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

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=> s l3 and porphyrin
         40651 PORPHYRIN
         27798 PORPHYRINS
         47715 PORPHYRIN
                 (PORPHYRIN OR PORPHYRINS)
L6         758 L3 AND PORPHYRIN

=> s l3 and niosome
           359 NIOSOME
           479 NIOSOMES
           500 NIOSOME
                 (NIOSOME OR NIOSOMES)
L7         241 L3 AND NIOSOME

=> s l6 and l7
L8           2 L6 AND L7

=> d 1-2 bib abs

L8   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2005:1004559  CAPLUS
DN   143:292573
TI   Niosome having metal porphyrin complex embedded
     therein, process for producing the same and drug with the use thereof
IN   Yuasa, Makoto; Oyaizu, Kenichi; Yamaguchi, Aritomo; Hanyuu, Yukihiro;
     Kasahara, Kazunori; Komuro, Masayasu
PA   Japan
SO   PCT Int. Appl., 40 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   WO 2005084665       A1     20050915    WO 2004-JP2750         20040304
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     EP 1731150          A1     20061213    EP 2004-717289         20040304
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
     CN 1942184          A      20070404    CN 2004-80042914       20040304
     KR 2007008623       A      20070117    KR 2006-720709         20061002
     US 20080269184      A1     20081030    US 2007-591658         20070815
PRAI WO 2004-JP2750      W      20040304
OS   MARPAT 143:292573
AB   Disclosed is a niosome having a metal porphyrin
     complex embedded therein which contains a cationized metal
     porphyrin complex and a niosome-forming substance.  This
     niosome having a metal porphyrin complex embedded
     therein has an SOD activity and can target super oxide anion radical
     (O2-.) and surely decrease it.  Because of being in the form of a
     niosome, it can be delivered to, for example, a cancer cell in
     vivo.  Therefore, it can decrease O2-. in a cancer cell and exert an
```

excellent effect of treating cancer. Moreover, it shows a selective effect and, therefore, is usable as a novel anticancer agent with no side effect. In addition, it can be hold in the blood, which makes it favorable as an antioxidant. Owing to this characteristic, it can protect the living body from in vivo disorders caused by active oxygen. For example, iron[5,10,15,20-tetrakis(2-methylpyridyl)porphyrin] was prepared, and mixed with stearic acid metal salt to form an ion complex of the porphyrin. Then, the ion complex was mixed with tween-61 and cholesterol to form a niosome to exam for its antitumor activity and antioxidant activity in vitro.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:674689 CAPLUS
DN 144:156398
TI Novel functional nano-size nonionic surfactant particles on which cationic metalloporphyrins are absorbed; preparation, characterization, and antioxidant properties
AU Yuasa, Makoto; Oyaizu, Kenichi; Hanyuu, Yukihiro; Kasahara, Kazunori; Yamaguchi, Aritomo
CS Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Noda, 278-8510, Japan
SO Journal of Oleo Science (2005), 54(8), 465-471
CODEN: JOSOAP; ISSN: 1345-8957
PB Japan Oil Chemists' Society
DT Journal
LA Japanese
AB Cationic manganese(III) 5,10,15,20-tetrakis(N-methylpyridinium-2-yl) porphyrin (MnT2MPyP) and manganese(III) 5,10,15,20-tetrakis(N-methylpyridinium-4-yl) porphyrin (MnT4MPyP) complexes were synthesized as superoxide dismutase (SOD) mimics which were introduced into niosomes to examine this effects on the capacity of drug delivery system (DDS) to maintain and perpetuate blood circulation. All the niosomes were prepared from polyoxyethylene sorbitan monostearate (Tween 61) by the conventional sonication method. SOD activity was measured by the stopped-flow anal. and the cytochrome c method. Sodium stearate-linked MnT2MPyP was the most effective catalyst along with SOD activity for decomposing O2- · at a second-order rate constant of 2.0+107 M-1 s-1 in Tween 61 niosomes. Rate consts. of metalloporphyrin-embedded niosomes for reaction with hydrogen peroxide (H2O2) and half-life times in H2O2 were also determined Metalloporphyrin-embedded niosomes were found to have greater half-life times compared to metalloporphyrin without niosomes. The present findings clearly indicate that metalloporphyrin-embedded niosomes are highly effective for bringing about O2- · decomposition and should thus find application as DDS in antioxidant drugs.

```
=> s l3 and ((liposome OR "Pharmaceutical liposomes") OR "Liposomes")
         40348 LIPOSOME
         52181 LIPOSOMES
         59952 LIPOSOME
                 (LIPOSOME OR LIPOSOMES)
        341449 "PHARMACEUTICAL"
         93542 "PHARMACEUTICALS"
        397390 "PHARMACEUTICAL"
                 ("PHARMACEUTICAL" OR "PHARMACEUTICALS")
         52181 "LIPOSOMES"
          4949 "PHARMACEUTICAL LIPOSOMES"
                 ("PHARMACEUTICAL"(W)"LIPOSOMES")
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         52181 "LIPOSOMES"
L9       10368 L3 AND ((LIPOSOME OR "PHARMACEUTICAL LIPOSOMES") OR "LIPOSOMES")

=> s l6 and l9
L10         59 L6 AND L9

=> s l10 and drug delivery
        864061 DRUG
        380271 DRUGS
       1044341 DRUG
                 (DRUG OR DRUGS)
        330079 DELIVERY
          2027 DELIVERIES
        331301 DELIVERY
                 (DELIVERY OR DELIVERIES)
        233444 DRUG DELIVERY
                 (DRUG(W)DELIVERY)
L11         19 L10 AND DRUG DELIVERY

=> d 1-19 bib hitstr abs

L11  ANSWER 1 OF 19  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2007:350750  CAPLUS
DN   147:307839
TI   Design of pH-sensitive nano-carrier with control ability of in vivo
     free-radicals
AU   Kawakami, Hiroyoshi
CS   Department of Applied Chemistry, Tokyo Metropolitan University, Hachioji,
     Tokyo, 192-0397, Japan
SO   Maku (2006), 31(6), 290-295
     CODEN: MAKUD9; ISSN: 0385-1036
PB   Nippon Maku Gakkai
DT   Journal
LA   Japanese
IT   9005-65-6, Tween-80.
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (pH-sensitive liposomes with control ability of in vivo
        free-radicals in the treatment of cancer)
RN   9005-65-6  CAPLUS
CN   Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  (CA
     INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
AB   Liposomes are well known to be drug carriers of the phospholipid
     bilayer with potential application in drug and gene deliveries.  However,
     the cellular uptake of liposomes generally follows an endocytic
     pathway so that most liposomes remain entrapped endosomes and
     are unable to reach the cytoplasmic space.  To overcome this problem,
     pH-sensitive liposomes, which are designed to undergo rapid
     destabilization in the acidic environments of endosomes, have been
     synthesized.  We report the novel design of an antioxidant or anticancer
     drug delivery system based on a pH-sensitive
     liposome retaining the metalloporphyrin as an SOD mimic.  The
     liposomes contained cationic/anionic lipid combinations and were
     composed of Fe-porphyrin, L-α-phosphatidylcholine (DMPC),
     dimethylditetradecylammonium bromide (DTDAB), sodium oleate (OANa), and
     Tween-80.  The size of the liposome was approx. 30 nm,
     indicating that the resulting liposome was a nanoparticle.

L11  ANSWER 2 OF 19  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2007:155681  CAPLUS
```

DN 146:407827
TI pH-sensitive liposome retaining Fe-porphyrin as SOD mimic for novel anticancer drug delivery system
AU Kawakami, Hiroyoshi; Hiraka, Kazue; Tamai, Miho; Horiuchi, Aiko; Ogata, Akihiko; Hatsugai, Tomomi; Yamaguchi, Aritomo; Oyaizu, Kenichi; Yuasa, Makoto
CS Department of Applied Chemistry, Tokyo Metropolitan University, Hachioji, Tokyo, 192-0397, Japan
SO Polymers for Advanced Technologies (2007), 18(1), 82-87
CODEN: PADTE5; ISSN: 1042-7147
PB John Wiley & Sons Ltd.
DT Journal
LA English
IT 9005-65-6, Tween-80
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pH-sensitive liposome retaining iron-porphyrin as SOD mimic for anticancer drug delivery system)
RN 9005-65-6 CAPLUS
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
AB In this article the novel design of an anticancer drug delivery system is reported based on a pH-sensitive liposome retaining the Fe-porphyrin as a superoxide dismutase(SOD) mimic. The liposomes contained cationic/anionic lipid combinations and were composed of Fe-porphyrin, L-α-phosphatidylcholine, dimethylditetradecylammonium bromide, sodium oleate, and Tween-80. The size of the liposome was approx. 30 nm. The EC50 value (the effective concentration of compound required to produce a 50% LD against cells) of the liposome was found to be significantly smaller than that of cisplatin as the control drug, suggesting that the liposome showed a high cytotoxicity toward the cancer cells. This is due to the fact that the pH-sensitive liposome rapidly corresponds to the acidic environments of the endosomes and is unstable, and the Fe-porphyrin is delivered into the cytosol. This results suggests that O2- may be useful as a target mol. to induce the selective death of cancer cells and that a pH-sensitive liposome retaining Fe-porphyrin as an SOD mimic is a new class of anticancer agent.
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:133743 CAPLUS
DN 148:17232
TI Synthesis of cationic manganese porphyrin bearing alkylsulfonio groups and evaluation of their antioxidant activities
AU Yuasa, Makoto; Oyaizu, Kenichi; Murata, Hidenori; Komuro, Masayasu; Awa, Ryota; Ohkubo, Ayumi
CS Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Noda, 278-8510, Japan
SO Journal of Oleo Science (2007), 56(2), 95-101
CODEN: JOSOAP; ISSN: 1345-8957
PB Japan Oil Chemists' Society
DT Journal
LA Japanese
IT 691397-13-4, Pluronic F-68
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthesis of cationic manganese porphyrin bearing
alkylsulfonio groups and evaluation of their antioxidant activities)

RN 691397-13-4 CAPLUS

CN Oxirane, 2-methyl-, polymer with oxirane, triblock (CA INDEX NAME)

CM 1

CRN 75-56-9
CMF C3 H6 O

CM 2

CRN 75-21-8
CMF C2 H4 O

AB A water-soluble cationic 5,10,15,20-tetrakis(2-dimethylsulfoniophenyl)-porphinatomanganese (III) ion (MnT2M2SuP) and a 5,10,15,20-tetrakis(4-dimethylsulfoniophenyl)porphinatomanganese(III) ion (MnT4M2SuP) were synthesized as superoxide dismutase (SOD) mimics which were introduced into PEG- liposome composed of dimyristoylphosphatidylcholine (DMPC) and Pluronic F-68 to examine the effect of the liposome on the capacity for use as drug delivery system (DDS) to maintain and perpetuate blood circulation. Fluorescence spectra in pseudo blood circulation expts. indicated that MnT4M2SuP continued to be bundled in PEG-liposome , while fluorescence from cross-section of cell observed by confocal laser scanning microscope indicated that PEG-liposome was ingested into a cell. SOD activity was determined by stopped-flow anal., which allowed the determination of kcat values for the reaction of the metalloporphyrins with superoxide anion radical (·O2-). Solution of PEG-liposome loaded with MnT2M2SuP or MnT4M2SuP were the most effective catalyst as a SOD mimic to decompose ·O2- at second-order rate consts. of 3.5-4.5 + 107 M-1 s-1.

L11 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:133674 CAPLUS

DN 147:371446

TI Antioxidant and anticancer properties of metalloporphyrins embedded in liposomes

AU Yuasa, Makoto; Oyaizu, Kenichi; Murata, Hidenori; Sahara, Yoshizumi; Hatsugai, Tomomi; Ogata, Akihiko

CS Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Noda, 278-8510, Japan

SO Journal of Oleo Science (2007), 56(2), 87-93
CODEN: JOSOAP; ISSN: 1345-8957

PB Japan Oil Chemists' Society

DT Journal

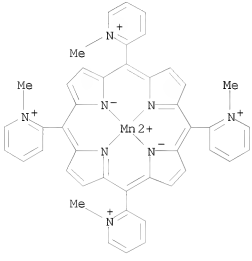
LA Japanese

IT 65028-70-8
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);

PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antioxidant and anticancer properties of metalloporphyrins embedded in liposomes)

RN 65028-70-8 CAPLUS

CN Manganese(4+), [[2,2',2'',2'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[1-methylpyridiniumato]](2-)-κN21,κN22,κN23,κN24]-, (SP-4-1)- (9CI) (CA INDEX NAME)



IT 691397-13-4, Pluronic F-68
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antioxidant and anticancer properties of metalloporphyrins embedded in liposomes)

RN 691397-13-4 CAPLUS

CN Oxirane, 2-methyl-, polymer with oxirane, triblock (CA INDEX NAME)

CM 1

CRN 75-56-9
CMF C3 H6 O

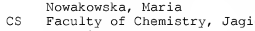
CM 2

CRN 75-21-8
CMF C2 H4 O

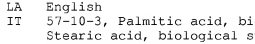
AB Reactive oxygen species (ROS) are implicated in many disease such as

inflammation, arteriosclerosis, cancer. Therefore, a water-soluble cationic metalloporphyrins with SOD activity are studied widely as antioxidant drugs. Further, liposomes are applied to drug delivery system (DDS) as drug carriers and investigated for example disposition and stability. We designed PEG modified liposomes for avoiding reticuloendothelial system (RES) and embedded cationic metalloporphyrins for DDS, evaluated antioxidant and anticancer property. Preservation of these particle size measured DLS in an in vitro system, in order to simulate in vivo conditions of flow. Result of this measurement, we found Pluronic F-68/ liposomes have a long circulation property, and avoid fusion with plasma protein. SOD activity was determined by the stopped-flow anal. and cytochrome c assay, which allowed the evaluation of kcat and IC50 for the reaction with a superoxide anion radical (·O2-). Anti cancer property was measured by cell viability test. We found that F-68/ liposomes were the most effective catalyst as antioxidant and anticancer. These results revealed that porphyrin-embedded PEG-liposomes had the property of long circulation in blood and that this compound was effective as a SOD model compound with a drug carrier capacity.

L11 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2006:379466 CAPLUS
DN 145:460088
TI Pegylated tetraarylporphyrin entrapped in liposomal membranes
AU Kepczynski, Mariusz; Nawalany, Kinga; Jachimska, Barbara; Romek, Marek; Nowakowska, Maria
CS Faculty of Chemistry, Jagiellonian University, Krakow, 30-060, Pol.
SO Colloids and Surfaces, B: Biointerfaces (2006), 49(1), 22-30
CODEN: CSBBEQ; ISSN: 0927-7765
PB Elsevier B.V.
DT Journal
LA English
IT 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 112-80-1, Oleic acid, biological studies
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pegylated tetraarylporphyrin entrapped in liposomal membranes for photodynamic therapy)
RN 57-10-3 CAPLUS
CN Hexadecanoic acid (CA INDEX NAME)

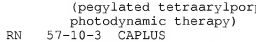


RN 57-11-4 CAPLUS
CN Octadecanoic acid (CA INDEX NAME)



RN 112-80-1 CAPLUS
CN 9-Octadecenoic acid (9Z)- (CA INDEX NAME)

Double bond geometry as shown.



AB A system of poly(ethylene glycol) bound tetraarylporphyrin entrapped in liposomal membranes was investigated. The interactions between the 5-(4-hydroxymethylphenyl)-10,15,20-tritolylporphyrin (Po) covalently attached to the poly(ethylene glycol) chain (PEG-Po), and phosphatidylcholine liposomes in the aqueous solution were studied. The adsorption of the investigated polymer to lipid vesicles was confirmed by measurements of dynamic light scattering and zeta potential. Exptl. results demonstrate that the diameter of liposomes increased and the absolute value of the zeta potential decreased after addition of PEG-Po. The binding consts. (Kb) of Po chromophores to liposome in pH range from 5.2 to 9.0 were determined using fluorescence spectroscopy. The degree of binding was found to be pH-independent and the average value was 24.6 ± 0.9 mg ml-1. The acid-base properties of the porphyrin chromophores and their aggregation in an aqueous solution were also studied. pK values associated with imine-N protonation of the porphyrin core were found to be 2.59 and 0.68 at the ionic strength of 0.1 M. The equilibrium constant for dimerization, KD, was found to be 5 + 103 M-1.

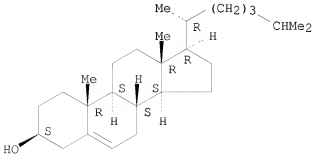
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2006:210135 CAPLUS
DN 144:260853
TI Liposome compositions for cancer therapy, and manufacture thereof
IN Aoki, Yoichi; Ueda, Eiichi
PA Konica Minolta Medical & Graphic, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006063009	A	20060309	JP 2004-246737	20040826
PRAI JP 2004-246737		20040826		

IT 57-88-5, Cholest-5-en-3-ol (3β)-, biological studies
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(liposome compns. for cancer therapy, and manufacture thereof)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



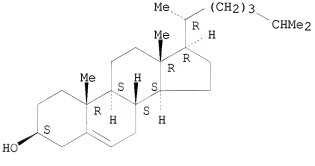
AB The invention relates to a liposome for cancer therapy, formed from polyethylene glycol group-containing compound with other phospholipid membrane components by using supercrit. or subcrit. carbon dioxide, wherein the liposome has an average particle size 0.75-0.85 μm and contains an active component in the lipid membrane or inner water phase with no organic solvent. The liposome shows improved stability of the active component, and enables efficient delivery of the active component. A method for manufacturing the liposome is also disclosed. For example, a liposome was prepared from dipalmitoylphosphatidylcholine, cholesterol, ethoxylated phospholipid (Sunbright DSPE-020CN), and adriamycin by using supercrit. carbon dioxide.

L11 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2006:210040 CAPLUS
DN 144:260852
TI Liposome compositions for cancer therapy, and manufacture thereof
IN Aoki, Yoichi; Ueda, Eiichi
PA Konica Minolta Medical & Graphic, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006063008	A	20060309	JP 2004-246736	20040826
PRAI	JP 2004-246736		20040826		

IT 57-88-5, Cholesterol, biological studies
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(liposome compns. for cancer therapy, and manufacture thereof)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

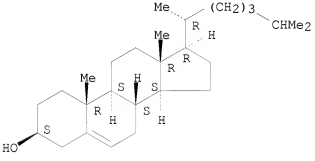
Absolute stereochemistry.



AB The invention relates to a liposome having an average particle size 0.75-0.85 μm and containing an active component in the lipid membrane or inner water phase with no organic solvent. The liposome shows improved stability of the active component, and is suitable for use for intraarterial injection chemotherapy, neutron capture therapy, and phototherapy. A method for manufacturing the liposome by using supercrit. or subcrit. carbon dioxide is also disclosed. For example, a liposome was prepared from dipalmitoylphosphatidylcholine, cholesterol, ethoxylated phospholipid (Sunbright DSPE-020CN), and iopamidol by using supercrit. carbon dioxide.

L11 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:641688 CAPLUS
DN 143:208263
TI Topical use of liposomal copper palmitate formulation blocks porphyrin-induced photosensitivity in rats
AU Bilgin, Mehmet D.; Elcin, A. Eser; Elcin, Y. Murat
CS Department of Biophysics, Medical Faculty, Adnan Menderes University, Aydin, 09100, Turk.
SO Journal of Photochemistry and Photobiology, B: Biology (2005), 80(2), 107-114
CODEN: JPPBEG; ISSN: 1011-1344
PB Elsevier B.V.
DT Journal
LA English
IT 57-88-5, Cholesterol, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as liposome component; topical liposomal copper palmitate blocks PDT photosensitizer-induced PpIX photosensitivity)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



IT 57-10-3, Palmitic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(topical liposomal copper palmitate blocks PDT photosensitizer-induced PpIX photosensitivity)
RN 57-10-3 CAPLUS
CN Hexadecanoic acid (CA INDEX NAME)

AB Photodynamic therapy (PDT) is a new treatment modality that uses porphyrin derivs. and visible light, especially for the treatment of cancer. However, PDT with certain photosensitizers can cause prolonged skin photosensitization. This is particularly true for Photofrin II (Photofrin)-mediated PDT where patients are required to avoid direct exposure to sunlight for a period of 4-6 wk. This is the only long-term adverse reaction to the drug. Recent studies have shown that topical copper treatment avoids this type of inflammatory reaction. In this study, we have tested the efficiency of the liposomal formulation of copper palmitate on porphyrin-photosensitized rats. Initially, adult male Sprague-Dawley rats were rendered photosensitive either by administration of Photofrin or aminolevulinic acid (ALA), a precursor of protoporphyrin IX (PpIX). Prior to this, their dorsal skin was shaved and treated topically with a cream consisting of either empty or copper palmitate-encapsulated liposomal formulation. After being kept in a

dimmed light environment, the rats were exposed to visible light, and inflammatory responses were inspected. Histol. studies revealed that no inflammatory cells were present at the skin sites treated with liposomal cream containing copper palmitate in the Photofrin-sensitized group while no reduction in the number of inflammatory cells was observed at the skin samples treated with the empty liposomes. In conclusion, the data demonstrate the significant protective effect of topically-applied liposome-encapsulated copper palmitate against both Photofrin and ALA-induced PpIX photosensitivity.

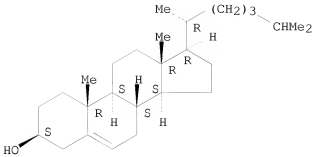
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:300287 CAPLUS
DN 142:372464
TI Compositions comprising immunostimulatory nucleic acid-lipophilic conjugates and antigen or therapeutic agent for treating allergy, cancer, infection and autoimmune disease
IN Vollmer, Joerg; Krieg, Arthur M.; Uhlmann, Eugen
PA Coley Pharmaceutical Group, Inc., USA; Coley Pharmaceutical GmbH
SO PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005030259	A2	20050407	WO 2004-US31748	20040927
	WO 2005030259	A3	20051110		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004275876	A1	20050407	AU 2004-275876	20040927
	CA 2536139	A1	20050407	CA 2004-2536139	20040927
	US 20050130911	A1	20050616	US 2004-952254	20040927
	EP 1663316	A2	20060607	EP 2004-789138	20040927
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	JP 2007506790	T	20070322	JP 2006-528305	20040927
PRAI	US 2003-505977P	P	20030925		
	WO 2004-US31748	W	20040927		

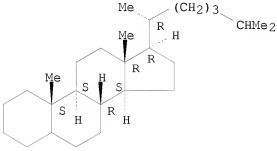
IT 57-88-5D, Cholesterol, derivs. and conjugates 14982-53-7D , Cholestane, derivs. and conjugates
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. comprising immunostimulatory nucleic acid-lipophilic conjugates and antigen or therapeutic agent for treating allergy, cancer, infection and autoimmune disease)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



RN 14982-53-7 CAPLUS
CN Cholestane (CA INDEX NAME)

Absolute stereochemistry.



AB The invention relates to a nucleic acid-lipophilic conjugates and methods for modulating an immune response using the conjugates. The lipophilic moiety associated with an immunostimulatory nucleic acid.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:34446 CAPLUS
DN 142:141238
TI Metal porphyrin complex-embedded liposomes for pharmaceuticals
IN Yuasa, Makoto; Matsukura, Noriyoshi; Yamaguchi, Aritomo; Kawakami, Hiroyoshi; Nagaoka, Shoji; Abe, Masahiko; Takebayashi, Hitoshi; Horiuchi, Aiko; Ogata, Akihiko; Sakaya, Takeshi
PA Makoto Yuasa, Japan
SO U.S. Pat. Appl. Publ., 20 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050008687	A1	20050113	US 2004-788263	20040301
	JP 2005041869	A	20050217	JP 2004-200163	20040707
PRAI	JP 2003-193138	A	20030707		
	JP 2003-193139	A	20030707		

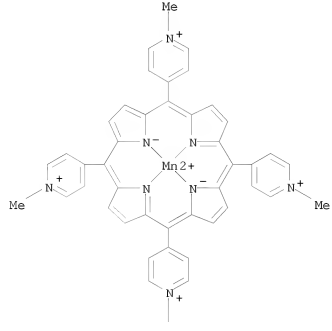
OS MARPAT 142:141238
IT 72924-08-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(metal porphyrin complex-embedded liposomes for pharmaceuticals)

RN 72924-08-4 CAPLUS

CN Manganese(4+), [[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl-κN21,κN22,κN23,κN24)tetrakis[1-methylpyridiniumato]](2-)]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

IT 872-85-5, 4-Pyridylcarboxaldehyde 1121-60-4, 2-Pyridylcarboxaldehyde 6156-78-1, Manganese acetate tetrahydrate 7789-46-0, Iron bromide (FeBr2)
RL: RCT (Reactant); RACT (Reactant or reagent)
(metal porphyrin complex-embedded liposomes for pharmaceuticals)

RN 872-85-5 CAPLUS

CN 4-Pyridinecarboxaldehyde (CA INDEX NAME)

RN 1121-60-4 CAPLUS

CN 2-Pyridinecarboxaldehyde (CA INDEX NAME)

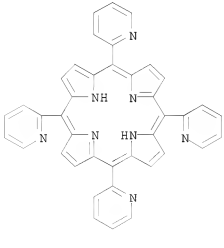
RN 6156-78-1 CAPLUS
CN Acetic acid, manganese(2+) salt, tetrahydrate (8CI, 9CI) (CA INDEX NAME)

●1/2 Mn(II)

●2 H_2O

RN 7789-46-0 CAPLUS
CN Iron bromide (FeBr2) (CA INDEX NAME)

IT 40904-90-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(metal porphyrin complex-embedded liposomes for pharmaceuticals)
RN 40904-90-3 CAPLUS
CN 21H,23H-Porphine, 5,10,15,20-tetra-2-pyridinyl- (CA INDEX NAME)



IT 57-10-3D, Palmitic acid, alkali metal salts 57-11-4D, Stearic acid, alkali metal salts 57-88-5, Cholesterol, biological studies 112-80-1, Oleic acid, biological studies

112-80-1D, Oleic acid, alkali metal salts 143-02-2D, alkali metal salts 143-03-3D, alkali metal salts 143-07-7D, Lauric acid, alkali metal salts 151-41-7D, Dodecylsulfuric acid, alkali metal salts 544-63-8D, Myristic acid, alkali metal salts 4754-44-3D, Tetradecylsulfuric acid, alkali metal salts 9005-65-6, Tween 80 9005-67-8, Tween 61 823808-59-9D, metal complexes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(metal porphyrin complex-embedded liposomes for pharmaceuticals)

RN 57-10-3 CAPLUS
CN Hexadecanoic acid (CA INDEX NAME)

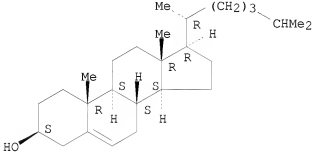
$HO_2C-(CH_2)_{14}-Me$

RN 57-11-4 CAPLUS
CN Octadecanoic acid (CA INDEX NAME)

$HO_2C-(CH_2)_{16}-Me$

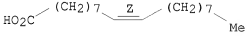
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



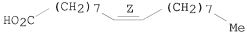
RN 112-80-1 CAPLUS
CN 9-Octadecenoic acid (9Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 112-80-1 CAPLUS
CN 9-Octadecenoic acid (9Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 143-02-2 CAPLUS
CN 1-Hexadecanol, 1-(hydrogen sulfate) (CA INDEX NAME)

$HO_3SO-(CH_2)_{15}-Me$

RN 143-03-3 CAPLUS
CN Sulfuric acid, monooctadecyl ester (CA INDEX NAME)

$HO_3SO-(CH_2)_{17}-Me$

RN 143-07-7 CAPLUS
CN Dodecanoic acid (CA INDEX NAME)

$HO_2C-(CH_2)_{10}-Me$

RN 151-41-7 CAPLUS
CN Sulfuric acid, monododecyl ester (CA INDEX NAME)

$HO_3SO-(CH_2)_{11}-Me$

RN 544-63-8 CAPLUS
CN Tetradecanoic acid (CA INDEX NAME)

$HO_2C-(CH_2)_{12}-Me$

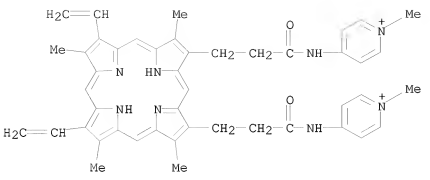
RN 4754-44-3 CAPLUS
CN 1-Tetradecanol, 1-(hydrogen sulfate) (CA INDEX NAME)

$HO_3SO-(CH_2)_{13}-Me$

RN 9005-65-6 CAPLUS
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9005-67-8 CAPLUS
CN Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivs. (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 823808-59-9 CAPLUS
CN Pyridinium, 4,4'-[(7,12-diethenyl-3,8,13,17-tetramethyl-21H,23H-porphine-2,18-diyl)bis[(1-oxo-3,1-propanediyl)imino]]bis[1-methyl- (9CI) (CA INDEX NAME)



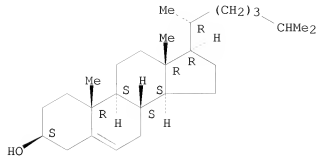
AB A metalloporphyrin-complex-embedded liposome comprising a cationic metalloporphyrin complex and a lipid having liposome -forming ability is disclosed. As metalloporphyrin-complex-embedded liposomes act on superoxide anion radicals (O2-), and can surely lower their concentration, they can exhibit superb effects for the treatment of cancers and have excellent characteristics as antioxidants. Thus, iron[5,10,15,20-tetrakis(2-methylpyridyl)porphyrin] was prepared starting from 2-pyridylcarboxaldehyde and pyrrole followed by reaction with FeBr2 of the resulting porphyrin and methylation. Liposomes were obtained from the above complex and stearic acid.

L11 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:837282 CAPLUS
DN 141:337627
TI Pharmaceutical composition containing artificial oxygen carrier
IN Kai, Toshiya; Katayama, Naohisa; Azuma, Yuko; Yokoe, Junichi; Kida, Yoshinori; Hukutomi, Ippei; Sato, Makoto; Tsuchida, Eishun; Takeoka, Shinji; Komatsu, Teruyuki; Sakai, Hiromi; So, Keitaro
PA Nipro Corporation, Japan
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1466649	A1	20041013	EP 2004-8419	20040407
	EP 1466649	B1	20080813		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	JP 2004307404	A	20041104	JP 2003-103875	20030408
	US 20040258745	A1	20041223	US 2004-819352	20040407
	US 7417118	B2	20080826		
	AT 404245	T	20080815	AT 2004-8419	20040407
	ES 2308061	T3	20081201	ES 2004-8419	20040407
PRAI	JP 2003-103875	A	20030408		

IT 57-88-5, Cholesterol, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. containing Hb-encapsulated liposome or porphyrin -iron conjugate with albumin as oxygen carriers)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



AB A pharmaceutical composition is described, containing an artificial oxygen carrier, which has high oxygen carrying efficiency; and has a required colloid osmotic pressure, an appropriate crystalloid osmotic pressure, pH, and electrolyte balance. The composition is prepared by appropriately adding at least one substance selected from the group consisting of a compound capable of providing a colloid osmotic pressure, an electrolyte, a saccharide, an amino acid, an antioxidant, a pH adjuster, and an isotonizing agent to a preparation including a Hb-encapsulated liposome in which a Hb is encapsulated in a liposome or to a preparation including a conjugate of a porphyrin-iron complex and albumin. For example, homocysteine and an equal molar amount (relative to Hb) of a pyridoxal 5-phosphate solution were added to a Hb solution (40 g/dL), the mixture was adjusted to pH 7.4, stirred at 4° overnight, filtered, and treated with CO to yield a carbon-monoxided Hb solution A mixture of dipalmitoylphosphatidylcholine (DPPC)/cholesterol/dipalmitoylphosphatidylglycerol (DPPG) (10:10:2) was dissolved in benzene was freeze-dried to yield lipid-mixed powder. The lipid-mixed powder was hydrated by adding the powder to the carbon-monoxided Hb solution and extruded to yield an HbV dispersion. Four-fold amount of physiol. saline was added to the HbV dispersion and ultrafiltrated to remove non-encapsulated Hb. The lipid concentration was adjusted to 2.0 g/dL with physiol. saline. A conjugate was formed by binding PEG and distearoylphosphatidylethanolamine via succinic acid (PEG-DSPE), dissolved in physiol. saline so as to have a PEG-DSPE content of 0.3 mol% relative to the total lipid amount, and added dropwise by portions to the HbV dispersion. The mixture was carbon monoxided and concentrated to yield an HbV pellet layer in the lower layer. Stirred and mixed under a CO atmospheric for 2 h (37°, 400 rpm), further stirred and mixed overnight at 4°. PBS was added to the HbV pellet layer, and ultracentrifugation was performed for washing. Then, a rHSA solution (5% in PBS) was added to the lower layer to yield 200 mL of HbV solution (Hb 10 g/dL, about pH 7.4). The resultant solution had a colloid osmotic pressure of about 20 mmHg and a crystalloid osmotic pressure of about 300 mOsm.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

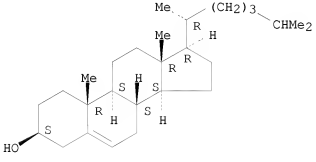
L11 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:912557 CAPLUS
DN 139:399862
TI Paramagnetic particles that provide improved relaxivity for MRI contrast agents
IN Lanza, Gregory M.; Wickline, Samuel A.
PA Barnes-Jewish Hospital, USA
SO U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. Ser. No. 153,395.
CODEN: USXXCO
DT Patent

LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20030215392	A1	20031120	US 2003-400379	20030326
	US 7235227	B2	20070626		
	US 20030185760	A1	20031002	US 2002-153395	20020521
	US 6869591	B2	20050322		
PRAI	US 2002-368100P	P	20020326		
	US 2002-153395	A2	20020521		

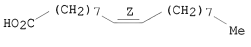
IT 57-88-5, Cholesterol, biological studies 112-80-1D, Oleic acid, conjugates with gadolinium-DTPA complexes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(paramagnetic particles that provide improved relaxivity for MRI contrast agents)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



RN 112-80-1 CAPLUS
CN 9-Octadecenoic acid (9Z)- (CA INDEX NAME)

Double bond geometry as shown.



AB An improved contrast agent for magnetic resonance imaging comprises particles to each of which is coupled a multiplicity of chelating agents containing paramagnetic ions. In the improved agent, the position of the ion is offset from the surface of the particle so as to improve the relaxivity imparted by the contrast agent. A tether offsetting the chelate from the surface of the particle may optionally contain cleavage sites permitting more facile excretion of the chelated paramagnetic ion. Gadolinium diethylenetriaminepentaacetic acid-bis-oleate (Gd-DTPA-BOA) or DTPA-phosphatidylethanolamine (DTPA-PE), was included in the surfactant comixt. at 20 mol% of the total lipid membrane. Gadolinium chloride was added in excess proportions as a post-emulsification step to nanoparticles formulated with DTPA-PE. Unbound gadolinium was removed by dialysis on the nanoparticles against distilled deionized water (300,000 MW). Gadolinium-DTPA-BOA was incorporated into the surfactant lipids as the complete paramagnetic compound Both Gd-DTPA-BOA and Gd-DTPA-PE emulsions were tested for free Gd3+ by using the arsenazo III reaction and showed no sign of unbound lanthanide. Each lipophilic nanoparticle presented more than 50,000 Gd-complexes along the water-lipid interface.
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD

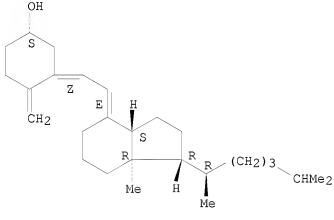
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:609843 CAPLUS
DN 139:169326
TI Device and methods for initiating chemical reactions and for the targeted delivery of drugs or other agents
IN Ueberle, Friedrich
PA Germany
SO U.S. Pat. Appl. Publ., 19 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20030147812	A1	20030807	US 2002-316273	20021211
	EP 1319423	A2	20030618	EP 2002-27643	20021211
	EP 1319423	A3	20031008		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRAI	US 2001-339285P	P	20011211		

IT 67-97-0, Cholecalciferol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(device and methods for initiating chemical reactions and for targeted delivery of drugs or other agents)
RN 67-97-0 CAPLUS
CN Cyclohexanol, 3-[(2E)-2-[(1R,3aS,7aR)-1-[(1R)-1,5-dimethylhexyl]octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-4-methylene-, (1S,3Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



AB The present invention is directed to methods and apparatus for the targeted initiation or deactivation of chemical reactions by an acoustic energy source in a host. Methods and apparatus for the targeted delivery of drugs, diagnostic agents and other compds. using an acoustic energy source are also provided.

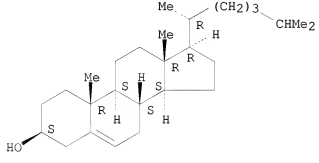
L11 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2000:553450 CAPLUS
DN 133:182966
TI Novel methods of imaging and treatment with targeted compositions
IN Ungr, Evan C.; Wu, Yunqiu

PA ImaRx Pharmaceutical Corp., USA
SO PCT Int. Appl., 211 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000045856	A2	20000810	WO 2000-US2620	20000202
	WO 2000045856	A3	20010215		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6521211	B1	20030218	US 1999-243640	19990203
	CA 2362200	A1	20000810	CA 2000-2362200	20000202
	EP 1146911	A2	20011024	EP 2000-914480	20000202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AU 777304	B2	20041007	AU 2000-35866	20000202
	AU 2005200059	A1	20050203	AU 2005-200059	20050107
PRAI	US 1999-243640	A	19990203		
	US 1995-497684	B2	19950607		
	US 1996-640464	B2	19960501		
	US 1996-660032	B2	19960606		
	US 1998-73913P	P	19980206		
	US 1998-218660	A2	19981222		
	WO 2000-US2620	W	20000202		

IT 57-88-5, Cholesterol, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ultrasound imaging and treatment with targeted compns.)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



AB Novel ultrasound methods comprising administering to a patient a targeted vesicle composition which comprises vesicles comprising a lipid, protein or polymer, encapsulating a gas, in combination with a targeting ligand, and scanning the patient using ultrasound. The scanning may comprise exposing the patient to a first type of ultrasound energy and then interrogating the patient using a second type of ultrasound energy. The targeting ligand preferably targets tissues, cells or receptors, including myocardial cells, endothelial cells, epithelial cells, tumor cells and the glycoprotein GPIIbIIIa receptor. The methods may be used to detect a

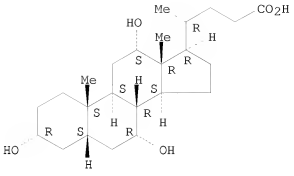
thrombus, enhancement of an old or echo genic thrombus low concns. of vesicles and vesicles targeted to tissues, cells or receptors.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2000:402087 CAPLUS
DN 133:39968
TI Separation of photosensitizer isomers and stereoisomers by laser-induced fluorescence capillary electrophoresis
IN Dolphin, David; Peng, Xuejun; Sternbert, Ethan D.
PA The University of British Columbia, Can.
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000034763	A2	20000615	WO 1999-US29352	19991210
	WO 2000034763	A3	20001012		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2353827	A1	20000615	CA 1999-2353827	19991210
	CA 2353827	C	20070626		
	EP 1137933	A2	20011004	EP 1999-965213	19991210
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002532682	T	20021002	JP 2000-587170	19991210
	US 20020079221	A1	20020627	US 2001-26980	20011217
	US 6878253	B2	20050412		
PRAI	US 1998-111955P	P	19981211		
	US 1999-321893	A	19990528		
	WO 1999-US29352	W	19991210		

IT 361-09-1, Sodium cholate
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(chiral selector; separation of BPD-MA from its liposomal formulation)
RN 361-09-1 CAPLUS
CN Cholan-24-oic acid, 3,7,12-trihydroxy-, sodium salt (1:1), (3α,5β,7α,12α)- (CA INDEX NAME)

Absolute stereochemistry.



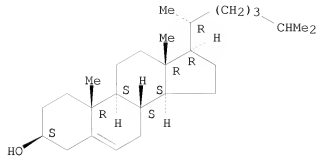
● Na

AB A method for the separation of isomers and stereoisomers of photosensitizers by Laser-Induced Fluorescence Capillary Electrophoresis has been developed. The limits of detection are 2.06 x 10-6 M, and the relative standard deviation for the separation was 2.90 % to 4.64 %. Benzoporphyrin derivative mono and diacid (BPD-MA, BPD-DA) enantiomers can be quant. determined in the range of 10-2 to 10-5 mg mL-1. In comparison with HPLC, CE has better resolution and efficiency. This separation method was successfully applied to the BPD enantiomers obtained from a matrix of bovine serum and from liposomally formulated material as well as from studies with rat, dog and human microsomes.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1999:491468 CAPLUS
DN 131:303296
TI Biopharmaceutics of Boronated Radiosensitizers: Liposomal Formulation of MnBOPP (Manganese Chelate of 2,4-(α,β-Dihydroxyethyl) Deuterioporphyrin IX) and Comparative Toxicity in Mice
AU Zhou, Rong; Balasubramanian, Sathyamangalam V.; Kahl, Stephen B.; Straubinger, Robert M.
CS Department of Pharmaceutics, University at Buffalo State University of New York, Amherst, NY, 14260-1200, USA
SO Journal of Pharmaceutical Sciences (1999), 88(9), 912-917
CODEN: JPMSAE; ISSN: 0022-3549
PB American Chemical Society
DT Journal
LA English
IT 57-88-5, Cholesterol, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(liposomal formulation of manganese chelate of 2,4-(α,β-dihydroxyethyl)deuterioporphyrin IX and comparative toxicity in mice)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



AB Binary treatment modalities such as photodynamic therapy (PDT) and neutron capture therapy (NCT) combine low-toxicity electromagnetic irradiation with an appropriate radiation sensitizer to enhance selectivity for tumor targets. The porphyrin derivative tetrakiscarborane carboxylate ester of 2,4-(α,β-dihydroxyethyl) deuteroporphyrin IX (BOPP) shows tumor-selective uptake and is active in both treatment modalities. BOPP also chelates paramagnetic ions such as Mn2+, and therefore its tissue accumulation and selectivity can be detected noninvasively by using magnetic resonance imaging. However, local and systemic toxicity appears elevated for the Mn2+ chelate (MnBOPP), but is poorly characterized. Here we have developed a liposomal formulation of MnBOPP and compared its toxicity with that of MnBOPP administered to mice in saline. The optimal liposome composition and maximal capacity to accommodate MnBOPP were investigated by differential scanning calorimetry and by encapsulation efficiency. MnBOPP was encapsulated quant. at up to 12 mol % (drug:lipid) in liposomes of varying composition, and remained incorporated during extended dialysis. Phase separation of drug- and lipid-rich domains was observed above 12% drug. MnBOPP in buffered saline was lethal to animals at 90 μmol/kg, and caused severe necrosis at the injection site at dose levels of 60 μmol/kg or greater. In contrast, MnBOPP formulated in liposomes was well tolerated at the highest tested dose of 135 μmol/kg, with the elimination of local toxicity.

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1998:728539 CAPLUS
DN 130:1847
TI Methods for treating viral infections with liposome-formulated photosensitizers
IN Ben-Hur, Ehud
PA New York Blood Center, Inc., USA
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

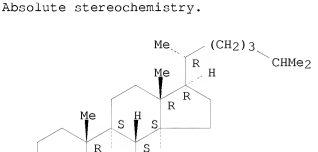
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9849281	A1	19981105	WO 1998-US8479	19980428
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				

CM, GA, GN, ML, MR, NE, SN, TD, TG

	US 6103706	A	20000815	US 1997-841042	19970429
	AU 9871654	A	19981124	AU 1998-71654	19980428
	US 6348453	B1	20020219	US 2000-543607	20000405
PRAI	US 1997-841042	A	19970429		
	WO 1998-US8479	W	19980428		

IT 57-88-5, Cholesterol, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liposome-formulated photosensitizers for treating viral infections)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



AB The invention provides a method for treating a viral infection in a subject in need of such treatment which comprises administering to the subject a photosensitizer formulated in a liposome carrier, and exposing the subject to light at a wavelength 20-40 nm greater than the maximum absorption of the photosensitizer at a sufficient dose and duration to treat the viral infection in the subject. The invention also provides a method for treating a viral infection in a subject in need of such treatment comprising administering to the subject (i) a photosensitizer formulated in a liposome carrier and (ii) at least one quencher, and exposing the subject to light at a sufficient wavelength, dose, and duration to treat the viral infection in the subject.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1998:484928 CAPLUS
DN 129:113548
OREF 129:23207a,23210a
TI Pharmaceutical or cosmetic compositions containing homogeneously charged particulate vector
IN Betbeder, Didier; Major, Michel
PA Biovector Therapeutics S.A., Fr.
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

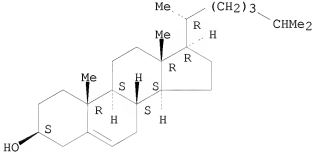
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9829102	A1	19980709	WO 1997-FR2397	19971223
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,				

UA, UG, US, UZ, VN, YU, ZW
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

FR	2757768	A1	19980703	FR 1996-16146	19961227
FR	2757768	B1	19990402		
CA	2276692	A1	19980709	CA 1997-2276692	19971223
AU	9856688	A	19980731	AU 1998-56688	19971223
EP	946153	A1	19991006	EP 1997-952990	19971223
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP	2001508425	T	20010626	JP 1998-529682	19971223
PRAI FR	1996-16146	A	19961227		
WO	1997-FR2397	W	19971223		

IT 57-88-5, Cholesterol, biological studies
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical or cosmetic compns. containing homogeneously charged particulate vector)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



AB The invention concerns a particulate carrier comprising a non-liquid hydrophilic nucleus; an amphiphilic lamella characterized in that the nucleus carries a global cationic, anionic or neutral charge and that the amphiphilic lamella carries a global charge of same polarity as that carried by the nucleus. The invention also concerns a pharmaceutical or cosmetic composition or a nutrient additive containing such a vector. Thus, maltodextrin (500 g) was treated with 7 g NaBH4 followed by the reaction with NaOH, 30.25 mL epichlorohydrin and 382.3 g glycidyltrimethylammonium chloride. The resulting gel was diluted with water a and neutralized with HOAc. Nanoparticle carriers were prepared by using the above polysaccharide and a phospholipid.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1998:1394 CAPLUS
DN 128:72421
OREF 128:14083a,14086a
TI Texaphyrin-lipophilic molecule-vesicle complexes, membrane incorporation of texaphyrins, and use in diagnosis and therapy
IN Young, Stuart W.; Wright, Meredith; Sessler, Jonathan L.; Mody, Tarak D.; Magda, Darren
PA Pharmacyclics, Inc., USA; Board of Regents, University of Texas System; Young, Stuart W.; Wright, Meredith; Sessler, Jonathan L.; Mody, Tarak D.; Magda, Darren

SO PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9746262	A2	19971211	WO 1997-US9501	19970604
	WO 9746262	A3	19980312		
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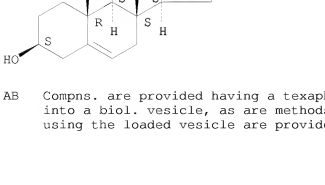
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2257225	A1	19971211	CA 1997-2257225	19970604
	AU 9732264	A	19980105	AU 1997-32264	19970604
	AU 727138	B2	20001207		
	CN 1225591	A	19990811	CN 1997-196446	19970604
	EP 954336	A2	19991110	EP 1997-927923	19970604
	EP 954336	B1	20040225		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9710685	A	20000111	BR 1997-10685	19970604
	NZ 333072	A	20000623	NZ 1997-333072	19970604
	JP 2000512279	T	20000919	JP 1998-500764	19970604
	IL 127315	A	20030529	IL 1997-127315	19970604
	AT 260121	T	20040315	AT 1997-927923	19970604
	US 20020006378	A1	20020117	US 1997-975090	19971120
	MX 9810198	A	20000531	MX 1998-10198	19981203
PRAI	US 1996-56917P	P	19960604		
	US 1996-657947	A	19960604		
	WO 1997-US9501	W	19970604		

OS MARPAT 128:72421
IT 57-88-5D, Cholesterol, texaphyrin conjugates, vesicle complexes
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(texaphyrin-lipophilic mol.-vesicle complexes, membrane incorporation of texaphyrins, and use in diagnosis and therapy)
RN 57-88-5 CAPLUS
CN Cholest-5-en-3-ol (3β)- (CA INDEX NAME)

Absolute stereochemistry.



AB Compns. are provided having a texaphyrin-lipophilic mol. conjugate loaded into a biol. vesicle, as are methods for imaging, diagnosis and treatment using the loaded vesicle are provided. For example, liposomes

or red blood cells loaded with a paramagnetic texaphyrin-lipophilic mol. conjugate have utility as a blood pool contrast agent, facilitating the enhancement of normal tissues, magnetic resonance angiog., and marking areas of damaged endothelium by their egress through fenestrations or damaged portions of the blood vascular system. Liposomes or cells loaded with a photosensitive texaphyrin-lipophilic mol. conjugate can be photolyzed, allowing for a photodynamic therapy effect at the site of lysis. Availability of red blood cells loaded with a photosensitive texaphyrin-lipophilic mol. conjugate provides a method for delivering a photodynamic therapeutic agent to a desired site with a high concentration of oxygen. By presenting the agent in this way, it is expected that a patient will experience less toxicity.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y

(FILE 'HOME' ENTERED AT 17:16:10 ON 13 MAY 2009)

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SET NOTICE LOGIN DISPLAY
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D

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L7 241 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L3 AND NIOSOME
L8 2 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L6 AND L7
D 1-2 BIB ABS
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E LIPOSOME+ALL/CT
SET LINE LOGIN
SET DETAIL LOGIN
L9 10368 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L3 AND ((LIPOSOME OR "PHARMACEUTICAL LIPOSOMES") OR "LIPOSOMES")
L10 59 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L6 AND L9
L11 19 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L10 AND DRUG DELIVERY
D 1-19 BIB HITSTR ABS

COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 139.56 225.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION

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NEWS 3	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 4	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 5	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS 6	FEB 10	COMPENDEX reloaded and enhanced
NEWS 7	FEB 11	WTEXTILES reloaded and enhanced
NEWS 8	FEB 19	New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS 9	FEB 19	Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01
NEWS 10	FEB 23	Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS 11	FEB 23	MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS 12	FEB 23	TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 MeSH terms
NEWS 13	FEB 23	Three million new patent records blast AEROSPACE into STN patent clusters
NEWS 14	FEB 25	USGENE enhanced with patent family and legal status display data from INPADOCDB
NEWS 15	MAR 06	INPADOCDB and INPAFAMDB enhanced with new display formats
NEWS 16	MAR 11	EPFULL backfile enhanced with additional full-text applications and grants
NEWS 17	MAR 11	ESBIOBASE reloaded and enhanced
NEWS 18	MAR 20	CAS databases on STN enhanced with new super role for nanomaterial substances
NEWS 19	MAR 23	CA/CAplus enhanced with more than 250,000 patent equivalents from China
NEWS 20	MAR 30	IMSPATENTS reloaded and enhanced
NEWS 21	APR 03	CAS coverage of exemplified prophetic substances enhanced
NEWS 22	APR 07	STN is raising the limits on saved answers
NEWS 23	APR 24	CA/CAplus now has more comprehensive patent assignee

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                information
 NEWS 24  APR 26  USPATFULL and USPAT2 enhanced with patent
                  assignment/reassignment information
 NEWS 25  APR 28  CAS patent authority coverage expanded
 NEWS 26  APR 28  ENCOMPLIT/ENCOMPLIT2 search fields enhanced
 NEWS 27  APR 28  Limits doubled for structure searching in CAS
                  REGISTRY
 NEWS 28  MAY 08  STN Express, Version 8.4, now available
 NEWS 29  MAY 11  STN on the Web enhanced
 NEWS 30  MAY 11  BEILSTEIN substance information now available on
                  STN Easy
 NEWS 31  MAY 14  DGENE, PCTGEN and USGENE enhanced with increased
                  limits for exact sequence match searches and
                  introduction of free HIT display format
 NEWS 32  MAY 15  INPADOCDB and INPAFAMDB enhanced with Chinese legal
                  status data

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'HOME' ENTERED AT 16:02:10 ON 19 MAY 2009

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.22       0.22

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DICTIONARY FILE UPDATES:  18 MAY 2009  HIGHEST RN 1147182-17-9

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experimental property data in the original document. For information
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=> file capl
COST IN U.S. DOLLARS SINCE FILE ENTRY 0.48 TOTAL SESSION 0.70
FULL ESTIMATED COST

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FILE COVERS 1907 - 19 May 2009 VOL 150 ISS 21
FILE LAST UPDATED: 18 May 2009 (20090518/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

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L1 1 US 20080269184/PN
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=> s e1-e29
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The E# entered is not currently defined.

=> se1

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"HELP COMMANDS" at an arrow prompt (=>).

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L2       12656 LIPOSOME/CT

=> s e2
L3        8315 LIPOSOMES/CT

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ENTER DISPLAY CODE (TI) OR ?:rn
E1 THROUGH E30 ASSIGNED

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           297 14982-53-7/BI
          1357 151-41-7/BI
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           396 516-95-0/BI
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         93571 "PHARMACEUTICALS"
        398332 "PHARMACEUTICAL"
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         52258 "LIPOSOMES"
          5005 "PHARMACEUTICAL LIPOSOMES"
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           346 NIOSOMES/AB
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            59 NIOSOME/TI
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                 ((NIOSOME OR NIOSOMES)/TI)
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MISSING TERM 'AND OR'
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operator followed immediately by another operator.

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L8         138 L4 AND NIOSOME/TI

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          4470 METALLOPORPHYRIN
          7135 METALLOPORPHYRINS
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L9           63 L5 AND (PORPHYRIN OR METALLOPORPHYRIN)

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                 (NIOSOME OR NIOSOMES)
L10          2 L9 AND NIOSOME
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=> d 1-2 ibib abs

L10  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2005:1004559  CAPLUS
DOCUMENT NUMBER:          143:292573
TITLE:                    Niosome having metal porphyrin
                          complex embedded therein, process for producing the
                          same and drug with the use thereof
INVENTOR(S):              Yuasa, Makoto; Oyaizu, Kenichi; Yamaguchi, Aritomo;
                          Hanyuu, Yukihiro; Kasahara, Kazunori; Komuro, Masayasu
PATENT ASSIGNEE(S):       Japan
SOURCE:                   PCT Int. Appl., 40 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
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     WO 2005084665        A1    20050915    WO 2004-JP2750           20040304
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
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             TD, TG
     EP 1731150           A1    20061213    EP 2004-717289           20040304
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
     CN 1942184           A     20070404    CN 2004-80042914         20040304
     KR 2007008623        A     20070117    KR 2006-720709           20061002
     US 20080269184       A1    20081030    US 2007-591658           20070815
PRIORITY APPLN. INFO.:                      WO 2004-JP2750      W    20040304
OTHER SOURCE(S):          MARPAT 143:292573
AB   Disclosed is a niosome having a metal porphyrin
     complex embedded therein which contains a cationized metal
     porphyrin complex and a niosome-forming substance.  This
     niosome having a metal porphyrin complex embedded
     therein has an SOD activity and can target super oxide anion radical
     (O2-.) and surely decrease it.  Because of being in the form of a
     niosome, it can be delivered to, for example, a cancer cell in
     vivo.  Therefore, it can decrease O2-. in a cancer cell and exert an
     excellent effect of treating cancer.  Moreover, it shows a selective
     effect and, therefore, is usable as a novel anticancer agent with no side
     effect.  In addition, it can be hold in the blood, which makes it favorable
     as an antioxidant.  Owing to this characteristic, it can protect the
     living body from in vivo disorders caused by active oxygen.  For example,
     iron[5,10,15,20-tetrakis(2-methylpyridyl)porphyrin] was prepared,
     and mixed with stearic acid metal salt to form an ion complex of the
     porphyrin.  Then, the ion complex was mixed with tween-61 and
     cholesterol to form a niosome to exam for its antitumor activity
     and antioxidant activity in vitro.
REFERENCE COUNT:          18    THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10  ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
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ACCESSION NUMBER: 2005:674689 CAPLUS
DOCUMENT NUMBER: 144:156398
TITLE: Novel functional nano-size nonionic surfactant particles on which cationic metalloporphyrins are absorbed; preparation, characterization, and antioxidant properties
AUTHOR(S): Yuasa, Makoto; Oyaizu, Kenichi; Hanyuu, Yukihiro; Kasahara, Kazunori; Yamaguchi, Aritomo
CORPORATE SOURCE: Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Noda, 278-8510, Japan
SOURCE: Journal of Oleo Science (2005), 54(8), 465-471 CODEN: JOSOAP; ISSN: 1345-8957
PUBLISHER: Japan Oil Chemists' Society
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Cationic manganese(III) 5,10,15,20-tetrakis(N-methylpyridinium-2-yl) porphyrin (MnT2MPyP) and manganese(III) 5,10,15,20-tetrakis(N-methylpyridinium-4-yl) porphyrin (MnT4MPyP) complexes were synthesized as superoxide dismutase (SOD) mimics which were introduced into niosomes to examine this effects on the capacity of drug delivery system (DDS) to maintain and perpetuate blood circulation. All the niosomes were prepared from polyoxyethylene sorbitan monostearate (Tween 61) by the conventional sonication method. SOD activity was measured by the stopped-flow anal. and the cytochrome c method. Sodium stearate-linked MnT2MPyP was the most effective catalyst along with SOD activity for decomposing O2- · at a second-order rate constant of 2.0+107 M-1 s-1 in Tween 61 niosomes. Rate consts. of metalloporphyrin-embedded niosomes for reaction with hydrogen peroxide (H2O2) and half-life times in H2O2 were also determined Metalloporphyrin-embedded niosomes were found to have greater half-life times compared to metalloporphyrin without niosomes. The present findings clearly indicate that metalloporphyrin-embedded niosomes are highly effective for bringing about O2- · decomposition and should thus find application as DDS in antioxidant drugs.

```
=> s l9 and (nonionic or non-ionic) surfactant
MISSING OPERATOR ON-IONIC) SURFACTANT
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l9 and (nonionic or non-ionic) (A) surfactant
         79673 NONIONIC
           543 NONIONICS
         79854 NONIONIC
                 (NONIONIC OR NONIONICS)
       1053499 NON
            38 NONS
       1053528 NON
                 (NON OR NONS)
        307262 IONIC
           545 IONICS
        307545 IONIC
                 (IONIC OR IONICS)
          9415 NON-IONIC
                 (NON(W)IONIC)
        215520 SURFACTANT
        192503 SURFACTANTS
        274903 SURFACTANT
                 (SURFACTANT OR SURFACTANTS)
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         52477 (NONIONIC OR NON-IONIC) (A) SURFACTANT
L11          2 L9 AND (NONIONIC OR NON-IONIC) (A) SURFACTANT

=> s l11 not l10
L12          0 L11 NOT L10

=> FIL STNGUIDE
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   120.46     121.16

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -1.64      -1.64

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: May 15, 2009 (20090515/UP).

=> log
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y


     (FILE 'HOME' ENTERED AT 16:02:10 ON 19 MAY 2009)

     FILE 'REGISTRY' ENTERED AT 16:02:20 ON 19 MAY 2009

     FILE 'CAPLUS' ENTERED AT 16:02:28 ON 19 MAY 2009
L1           1 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  US 20080269184/PN
               SELECT L1 1 RN
               SET LINE 250
               SET DETAIL OFF
               E LIPOSOME+ALL/CT
               SET LINE LOGIN
               SET DETAIL LOGIN
L2       12656 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  LIPOSOME/CT
L3        8315 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  LIPOSOMES/CT
               SELECT L1 1 RN
L4      296567 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  (112-80-1/BI OR
               1121-60-4/BI OR 1338-43-8/BI OR 143-02-2/BI OR 143-03-3/BI OR
               143-07-7/BI OR 14982-53-7/BI OR 151-41-7/BI OR 313-04-2/BI OR
               361-09-1/BI OR 40904-90-3/BI OR 4754-44-3/BI OR 516-95-0/BI OR
               544-63-8/BI OR 57-10-3/BI OR 57-11-4/BI OR 57-88-5/BI OR
               6156-78-1/BI OR 65028-70-8/BI OR 67-97-0/BI OR 691397-13-4/BI
               OR 71794-64-4/BI OR 72924-08-4/BI OR 7789-46-0/BI OR 80-97-7/BI
                OR 823808-59-9/BI OR 864444-61-1/BI OR 872-85-5/BI OR
               9005-65-6/BI OR 9005-67-8/BI)
L5       10513 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L4 AND (NIOSOME OR
               LIPOSOME OR "LIPOSOMES" OR "PHARMACEUTICAL LIPOSOMES")
L6         241 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L4 AND NIOSOME
L7         210 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L4 AND (NIOSOME/AB OR
               NIOSOME/TI)
L8         138 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L4 AND NIOSOME/TI
               SET LINE 250
               SET DETAIL OFF
               E PORPHYRIN+ALL/CT
               SET LINE LOGIN
               SET DETAIL LOGIN
```

```
L9            63 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L5 AND (PORPHYRIN OR
                 METALLOPORPHYRIN)
L10            2 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L9 AND NIOSOME
                 D 1-2 IBIB ABS
L11            2 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L9 AND (NONIONIC OR
                 NON-IONIC) (A) SURFACTANT
L12            0 SEA FILE=CAPLUS SPE=ON  ABB=ON  PLU=ON  L11 NOT L10

     FILE 'STNGUIDE' ENTERED AT 16:07:34 ON 19 MAY 2009
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.70     121.86

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -1.64

STN INTERNATIONAL LOGOFF AT 16:13:20 ON 19 MAY 2009
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